

REMARKS

Claims 1-12, 35 and 37-39 remain in this application. Claims 42-60 have been canceled. Claims 13-34, 36 and 40-41 stand withdrawn from consideration as directed to a non-elected species of the elected invention. Claims 1, 4, 5, 8-11, 35, 37 and 39 have been amended. No new matter has been added to the claims. Applicant respectfully requests reconsideration and review of the application in light of the foregoing amendments and following remarks.

At the outset, Applicant acknowledges with appreciation the indication of allowable subject matter in Claim 5. Per the Examiner's suggestion, Applicant has amended Claim 5 to independent form, including all limitations of the base claim and any intervening claims. Also, Applicant has amended Claim 10 to depend from Claim 5. Accordingly, each of Claims 5, 10 and 11 (dependent on Claim 10) are considered to be in condition for allowance.

The Examiner rejected Claim 11 under 35 U.S.C. § 112, second paragraph, as indefinite. Specifically, the Examiner deemed the phrase "mounting the lead frame substrate on a lead frame" vague and indefinite. In response, Applicant has amended the claim to remove the objected phrase and recite that "said temporary connection bars are adapted to be removed from the lead frame substrate after said molding compound has fixed said semiconductor die pad, said plurality of termination pads, and said plurality of connection bars together." The amended claim is considered to be sufficiently definite to enable a person skilled in the art to understand the invention.

Before addressing the merits of the rejections based on prior art, Applicant provides the following brief description of the invention. The invention is directed to a lead frame substrate for use in a lead frame package that integrates a semiconductor die and passive components in the package. The micro lead frame substrate is formed from a sheet of conductive material that is patterned to form a plurality of semiconductor die pads, termination pads, and connection bars. The semiconductor die pads are each

adapted to have a semiconductor die affixed thereto. The termination pads are adapted to receive passive components (e.g., resistors, capacitors) and/or bonding wires affixed thereto.

More particularly, the connection bars further comprise permanent connection bars and temporary connection bars. The permanent connection bars provide permanent electrical connections between the semiconductor die pads and the termination pads. The temporary connection bars also couple the semiconductor die pads and the termination pads, but are intended only to provide a temporary physical connection between the pads to provide structural integrity to the lead frame substrate during assembly. Thereafter, a molding compound is applied to the lead frame substrate, which provides permanent structural integrity to the lead frame substrate, whereupon the temporary connection bars may be removed. Applicant has amended the claims to clarify certain of these aspects of the invention, and also to put the claims into better form for allowance.

The Examiner rejected Claims 1-4, 6-10, 12 and 35-39 under 35 U.S.C. § 102(e) as anticipated by Sakamoto et al. Applicant respectfully traverses this rejection.

Sakamoto et al. discloses a hybrid integrated circuit device that includes a mounting board having a plurality of conductive patterns. A semiconductor element is electrically connected to the conductive patterns using fine metal wire. Sakamoto et al. further discloses a plurality of kinds of fine metal wire made using different materials in order to permit communication of different size signals. Unlike the present application, Sakamoto et al. fails to suggest or disclose the use of temporary connection bars to provide structural integrity to the mounting board until a molding compound could be applied. Sakamoto et al. therefore fails to anticipate any claim in the application. This ground of rejection should therefore be withdrawn.

In view of the foregoing, the Applicant respectfully submits that Claims 1-12, 35 and 37-39 are in condition for allowance. Reconsideration and withdrawal of the rejections is respectfully requested, and a timely Notice of Allowability is solicited. If the

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Examiner would consider it helpful to placing this application in condition for allowance, the Applicant encourages the Examiner to contact the undersigned counsel and conduct a telephonic interview.

To the extent necessary, Applicant petitions the Commissioner for a one-month extension of time, extending to November 14, 2005, the period for response to the Office Action dated July 14, 2005. A check in the amount of \$120.00 is enclosed for the one-month extension of time pursuant to 37 CFR §1.17(a)(1). The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0639.

Respectfully submitted,



Brian M. Berliner
Attorney for Applicant
Registration No. 34,549

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O'MELVENY & MYERS LLP
400 South Hope Street
Los Angeles, CA 90071-2899
Telephone: (213) 430-6000